

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A device for automatically sensing the wear state of movable wheels or rollers in conveying systems, comprising:

a measuring station through which the wheel or the roller runs, said measuring station arranged in a stationary fashion in the conveying path of the system, wherein diameter deviations of the wheel or of the roller from a predefined set point diameter can be sensed in a contactless fashion and signaled with said measuring station.

2. The device as claimed in claim 1, wherein diameter deviations of the wheel or of the roller are sensed optically with said measuring station.

3. The device as claimed in claim 2, wherein said measuring station comprises two parallel photoelectric barriers which are spaced apart from one another, said photoelectric barriers are directed tangentially with respect to the circumference of the wheel or roller and are spaced apart corresponding to the smallest permissible diameter of the wheel or of the roller, wherein the wheel or the roller is guided through said photoelectric barriers in order to sense diameter deviations.

4. The device as claimed in claim 3, including a slotted plate having two slots which are arranged spaced apart, each of said slots guiding a defined light beam from said photoelectric barriers onto sensors located opposite said slotted plate, thereby improving accuracy of said measuring station.

5. The device as claimed in claim 4, wherein said measuring station includes an evaluation unit which receives a measurement signal by the sensors, said evaluation unit evaluates the measurement signal and converts the measurement signal into a display signal.

6. The device as claimed in claim 5, including an initiator installed at the level of said measuring station, said initiator detecting the wheel or the roller in the measuring station.

7. The device as claimed in claim 6, including a reading device upstream of the measuring station, said reading device reading information which is carried along with the wheel or the roller.
8. The device as claimed in claim 1 used to sense the wear state of directing rollers or guide rollers on containers of baggage conveying systems.
9. The device as claimed in claim 1, wherein said measuring station comprises two parallel photoelectric barriers which are spaced apart from one another, said photoelectric barriers are directed tangentially with respect to the circumference of the wheel or roller and are spaced apart corresponding to the smallest permissible 5 diameter of the wheel or of the roller, wherein the wheel or the roller is guided through said photoelectric barriers in order to sense diameter deviations.
10. The device as claimed in claim 9, including a slotted plate having two slots which are arranged spaced apart, each of said slots guiding a defined light beam from said photoelectric barriers onto sensors located opposite said slotted plate, thereby improving accuracy of said measuring station.
11. The device as claimed in claim 10, wherein said measuring station includes an evaluation unit which receives a measurement signal by the sensors, said elevation unit evaluates the measurement signal and converts the measurement signal into a display signal.
12. The device as claimed in claim 11, including an initiator installed at the level of said measuring station, said initiator detecting the wheel or the roller in the measuring station.
13. The device as claimed in claim 12, including a reading device upstream of the measuring station, said reading device reading information which is carried along with the wheel or the roller.

14. The device as claimed in claim 1, wherein said measuring station includes an evaluation unit which receives a measurement signal by the sensors, said elevation unit evaluates the measurement signal and converts the measurement signal into a display signal.

15. The device as claimed in claim 14, including an initiator installed at the level of said measuring station, said initiator detecting the wheel or the roller in the measuring station.

16. The device as claimed in claim 15, including a reading device upstream of the measuring station, said reading device reading information which is carried along with the wheel or the roller.

17. The device as claimed in claim 1, including an initiator installed at the level of said measuring station, said initiator detecting the wheel or the roller in the measuring station.

18. The device as claimed in claim 17, including a reading device upstream of the measuring station, said reading device reading information which is carried along with the wheel or the roller.

19. The device as claimed in claim 1, including a reading device upstream of the measuring station, said reading device reading information which is carried along with the wheel or the roller.

20. A measuring method for automatically sensing the wear state of movable wheels or rollers in conveying systems, comprising:

providing two parallel photoelectric barriers which are spaced apart from one another in a defined fashion;

5 interpreting a brief simultaneous interruption of both photoelectric barriers when the wheel or the roller runs through said barriers as an indication of a wheel without wear or a roller without wear; and

interpreting the absence of a brief simultaneous interruption of both
photoelectric barriers when the wheel or the roller runs through the photoelectric
10 barriers as an indication of a worn wheel or a worn roller.

21. The method of claim 20 used to sense the wear state of directing rollers or
guide rollers on containers of baggage conveying systems.